IDC MarketScape: U.S. Ambulatory EMR/EHR for Midsize and Large Practices 2011 Vendor Assessment

IDC Health Insights: Healthcare Provider IT Strategies

IDC HEALTH INSIGHTS MARKETSCAPE EXCERPT #HI230719E

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IN THIS EXCERPT

The content for this excerpt was taken directly from the IDC MarketScape: "IDC MarketScape: U.S. Ambulatory EMR/EHR for Midsize and Large Practices 2011 Vendor Assessment" by Judy Hanover and Sven Lohse (Doc # HI230719). All or parts of the following sections are included in this excerpt: IDC Health Insights Opinion, In This Study, Situation Overview, Future Outlook, and Essential Guidance. Also included is Figure 1.

IDC HEALTH INSIGHTS OPINION

This IDC MarketScape provides an assessment of 10 electronic medical records/electronic health records (EMRs/EHRs) products that target midsize and large practices and qualify for American Recovery and Reinvestment Act of 2009 (ARRA) incentives. The market for EMRs/EHRs is maturing rapidly under the influence of government incentives under the ARRA. The primary trend influencing the EMR/EHR market at this time is regulatory change. This has led to rapid adoption, and IDC Health Insights expects this market to move from less than 25% adoption in 2009 to over 80% adoption by 2016. This study identifies measures for EMR/EHR vendor success that can be judged now and over the next three years, including:

- Prompt attention to product functionality and proactive communication with customers upon the introduction of regulatory change
- Breadth of functionality and perceived usability by providers
- Financial stability of the vendor
- Compatibility with mobile devices such as smartphones and tablets, particularly the iPad, as well as delivery models such as on-premise, hosted, multitenant software as a service (SaaS), and dedicated SaaS

IN THIS STUDY

This IDC MarketScape provides an evaluation of the market for EMRs/EHRs targeted at midsize and large ambulatory practices. Midsize and large ambulatory practices include those with 20 providers or more, and the vendors covered in this report represent those with a significant presence in this market. This report is not all inclusive, and many vendors that are not included in this report supply EMRs/EHRs to large practices. Eight vendors are covered in this report, while the EMR/EHR vendor space includes more than 150 vendors. The eight vendors in this report were selected on the basis of estimated market share, and all of the vendors in this report serve at least 15,000 providers. Additional ambulatory EMR/EHR vendors will be covered in *IDC MarketScape: U.S. Ambulatory EMR/EHR for Small Practices 2011 Vendor Assessment* (forthcoming), which covers emerging vendors with compelling technology serving smaller practices.

Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions in the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

The sources of information for this report include:

- **Vendor briefings.** Vendors whose products are featured in this report provided briefings, with the exception of McKesson, Epic Systems, and NextGen Healthcare, which were offered the opportunity to provide briefings but declined.
- **Customer references.** Interviews were held with customers of the products covered in the report, including those references provided by the vendors as well as other customer references known to IDC Health Insights. At least two detailed half-hour reference conversations were held for each product covered.
- **Secondary research.** Secondary research for the report included vendor, user, and product Web sites and blogs as well as existing

IDC Health Insights research covering this market and these products.

The definitions of EMR and EHR can be complicated and confusing.

This report uses the term *EMR/EHR* to refer to those EMR and EHR products that meet, or are expected to meet, the federal qualifications for certification for meaningful use.

SITUATION OVERVIEW

Introduction

EMR/EHR Market Drivers: ARRA and Healthcare Reform

In May 2011, office-based providers that had implemented and demonstrated Phase 1 of meaningful use under the law began receiving incentive payments, providing compelling motivation for providers to move forward on EMR/EHR implementations. Eligible providers (EPs) that implement a certified EMR/EHR before 2012 will receive the maximum incentive payments over the full five years, and for providers of Medicare services, this is up to $44,000, while Medicaid providers can qualify for up to $63,750 in incentives. This incentive, paid per provider, provides a significant opportunity for providers to help defray the costs associated with acquiring, implementing, and adopting an EMR/EHR. This is particularly true for midsize and large practices where economies of scale increase the impact of the incentives. Key IDC Health Insights findings include:

- The use of EMRs/EHRs in ambulatory practices with more than 20 providers can result in benefits, including a paperless environment, ubiquitous availability of clinical information, e-prescribing, electronic ordering and receipt of radiology and laboratory results, charge capture, and improvements to patient safety and the quality of care as a result of features such as clinical decision support.

- Large practices also see economies of scale that accrue with process efficiencies upon EMR/EHR introduction as improvements to charge capture, documentation, and billing practices enhance revenue for the practice, driving return on investment. However, selecting the right EMR/EHR and choosing functionality that meets the needs of the many providers in the practice without creating unnecessary complexity or support costs are critical.

FUTURE OUTLOOK

IDC MarketScape Ambulatory EMR/EHR for Midsize and Large Practices Market Vendor Assessment

The IDC vendor assessment for the ambulatory EMR/EHR for midsize and large practices market represents IDC's opinion on which vendors are well positioned today through current capabilities and which are best positioned to gain market share over the next few years. Positioning in the upper right of the grid indicates that vendors are well positioned to gain market share. For the purposes of discussion, IDC divided potential key strategy measures for success into two primary categories: capabilities and strategies.

Each product has been evaluated against 48 criteria and divided between the two main categories: current capabilities and strategy capabilities. Within each of these criteria, we have weighted specific features of the product or the product's vendor that are particularly significant for purchasers of the software and for users.

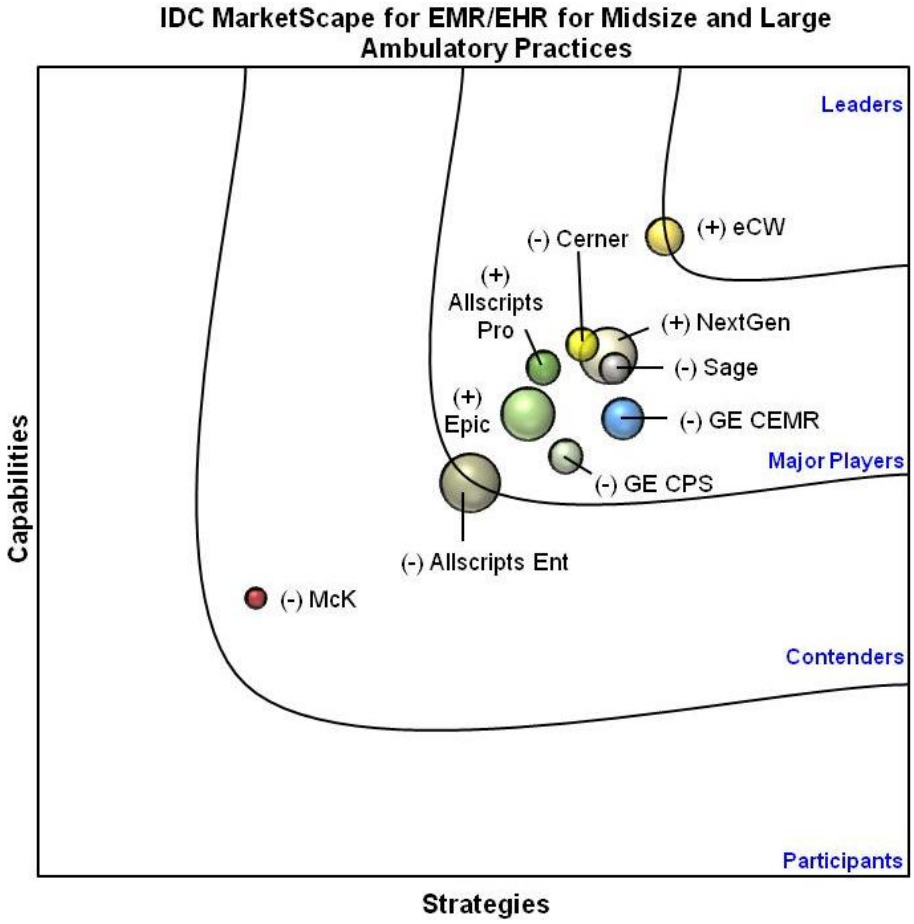
Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market. The capabilities scoring model weights the functionality, delivery model, customer service, and the financial condition or funding model of the vendor as the most important.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in one to four years. The strategies category focuses on high-level strategic decisions and underlying assumptions about offerings, customer segments, business, and go-to-market plans for the future, in this case defined as the next one to four years. Under this category, analysts look at whether or not a supplier's strategies in various areas are aligned with customer requirements (and spending) over a defined future time period. The strategies scoring model weights the functionality, pricing, sales and distribution model, and the financial condition or funding model of the vendor as the most important.

Figure 1 shows each vendor's position in the vendor assessment chart. Its market share is indicated by the size of the bubble and a (+), (-), or () icon indicates whether or not the vendor is growing faster than, slower than, or even with, respectively, overall market growth.

FIGURE 1

IDC MarketScape: U.S. Ambulatory EMR/EHR for Midsize and Large Practices Market Vendor Assessment



Source: IDC Health Insights, 2011

Vendor Summary Analysis

With respect to both current capabilities and strategy capabilities, eClinicalWorks, Cerner, Sage, and NextGen stand out among the "Major Players." Each offers competitive products that align with customer perceptions of value and strong functionality, and they have executed sound business strategies that are very likely to align with customer needs as the market evolves. However, each product demonstrates its own strengths. These strengths are highlighted in the profiles discussed in the sections that follow.

eClinicalWorks: eClinicalWorks

eClinicalWorks (**www.eclinicalworks.com**) is a privately held company founded in 1999 and headquartered in Westborough,

Massachusetts. It reports 2010 revenue of more than $150 million. eClinicalWorks is focused entirely on the ambulatory EMR/EHR and practice management space, and its product suite is marketed under the company name. eClinicalWorks is focused on providing low-cost, intuitive functionality to outpatient ambulatory practices of all sizes. The company has strong penetration among small, midsize, and large practice groups and networks of practices and claims 50,000 physicians in 8,000 practices use its products. The product suite includes an EMR/EHR and integrated practice management application.

eClinicalWorks stands out as a Major Player with respect to both criteria for current capabilities and strategies. A key to its competitive position lies in eClincalWorks' early commitment to, and competent execution of, the SaaS delivery model. In recent years SaaS has demonstrated that it is technologically reliable and secure enough to satisfy the requirements of current users in the mid-large ambulatory market. Thus users can now confidently expect to realize the significant reductions in initial investment, on-going cost, and overall price competitiveness that SaaS offers. Acceptance of SaaS in the provider marketplace has improved and SaaS has become a competitive differentiator for all ambulatory EMR/EHR vendors. We expect that SaaS will become even more important as a competitive advantage for eClinicalWorks in the future due to the demands for low cost infrastructure solutions.

The eClinicalWorks suite of EHR and PM software is typically deployed together and is available on most deployment platforms and payment models. The eClinicalWorks EMR/EHR is Internet based and can be either installed at customer sites or accessed as SaaS, supplied as an ASP by eClinicalWorks. About 90% of sales are direct, and eClinicalWorks provides its own implementation services using an in-house team and a templated 12-week implementation process for EMR and PM, eight weeks for just EMR.

Specific functionality for specific practice sizes, specialties, and usage (e.g., Patient Portal and eClinicalMobile) can be easily enabled within the basic software suite. eClinicalWorks integrates with numerous third-party hospital systems via XML, IHE, or HL7 data transfer. eClinicalWorks is enabled for use on wireless devices and optimized for use with tablet PCs. Reporting is ad hoc via Crystal Reports or Cognos and is individualized for the needs of the large provider groups that make up the majority of the company's customer base. eClinicalWorks reporting is used for participation in pay-for-performance programs by a number of its clients and has met the requirements for reporting by federally qualified health centers.

eClinicalWorks has experienced rapid growth since 2004 and claims to have grown 44% from 2009 to 2010. The range of practice sizes among its client base spans from 1 to 1,700 providers. High-profile

customers include Memorial Hermann, Children's Hospital Boston, Beth Israel Deaconess Medical Center, and many federally qualified health centers, as well as the New York City Department of Health and Mental Hygiene. eClinicalWorks is CCHIT ONC-ATCB certified for 2011–2012 with an additional certification for Child Health in 2008 and for 2011–2012.

ESSENTIAL GUIDANCE

To meet all of the challenges of EMR adoption and get to meaningful use while preparing for healthcare reform, it is clear that ambulatory providers need integrated EMR/EHR solutions that address not only the total cost of ownership for the technology but also the infrastructure, workflow, and human factor issues associated with the new technologies.

Healthcare reform in the provider space signifies a convergence of initiatives that will drive disruptive change in the provider industry. Ambulatory providers are initially faced with implementing and demonstrating meaningful use of EMR/EHR systems to secure incentive payments under ARRA; these systems provide enabling technology for a series of changes to operating models, information systems, and workflows that will facilitate providers' movement toward healthcare reform. In the emerging health reform ecosystem under PPACA, providers are faced with the need to provide higher-quality care, at lower cost, to more patients than ever before. To allow providers to accomplish this and participate successfully in healthcare reform, tools will be needed that facilitate change at the point of care, help providers understand and respond to changes in their operating environment, profitably participate in new business models, and comply with new regulatory initiatives.

Actions to Consider

Key Considerations for EMR/EHR Selection

Addressing as many issues as possible in the EMR/EHR solution will help accelerate adoption for providers and drive users toward both meaningful use and the quality and efficiency goals associated with healthcare reform. An EMR/EHR solution for an ambulatory practice should address:

- **EMR/EHR application selection and licensing.** EMR/EHR application choices include decisions about architecture and delivery. Practices should carefully consider whether they plan to invest in onsite servers and support, or if offsite hosting and software-as-a-service offerings are more practical given their available resources for support, facilities, and budget. Licensing options include subscription and perpetual licenses for installed or

hosted software, as well as lease agreements for SaaS options. Decisions on delivery and licensing affect the implementation process, the cost of the application, and the eventual experience of the practice in the day-to-day use of the application. The architecture of the application and how suitable this architecture is to delivery via hosting and/or SaaS are strong determinants of the functionality and performance available from the application, as well as the cost, and should be considered during the selection process.

- **Funding models and ARRA incentive availability.** While Phase 1 stimulus incentives became available in 2011, Phase 2 incentives will not be available until 2013, increasing the time lag between the EMR/EHR investment and a significant portion of the incentive payments. SaaS applications can help address this lag by lowering up-front costs, although practices should also look into financing that may be available from vendors and/or local hospitals to bridge the gap until the bulk of stimulus funds arrive.

- **Availability of functionality for ARRA and healthcare reform.** Demonstrating meaningful use requires the collection and aggregation of multiple data elements, specific reporting tools within the EMR/EHR, capabilities that may require patient-facing tools or portals, and health information exchange (HIE). While the Phase 1 meaningful use requirements have been finalized and all of the vendors covered in this IDC MarketScape have delivered the required functionality and are certified for meaningful use, their performance in this area has varied. With Phase 2 and 3 meaningful use requirements pending, and additional requirements expected to support the ICD-10 conversion deadline of October 1, 2013, as well as future requirements that will be determined to support accountable delivery and healthcare reform, vendor performance on delivering Phase 1 meaningful use functionality should be examined as a predictor of future performance meeting these regulatory change requirements. Providers making EMR/EHR selection decisions should consider a vendor's track record on the availability of meaningful use releases for Phase 1; the vendor's road map for ICD-10 and Phase 2 upgrades; the backlog/availability of implementation resources for implementing new releases once they are made available; the code quality and support issues customers may have experienced when implementing the Phase 1 releases; and the cost of upgrading, implementing, and/or purchasing additional product modules, such as a patient portal, or accessing functionality required for meaningful use. Additionally, the compatibility and ease of integration of the product with systems used by local, collaborating ambulatory providers, hospitals, and HIEs should be considered when selecting a system to avoid the future disruption and cost associated with replacing incompatible EMR/EHR products.

- **User interface.** EMR/EHR decisions for ambulatory practices should take user interface style into consideration. Unlike many of the other applications used in the ambulatory setting, such as practice management and billing applications, EMRs/EHRs are used by the providers themselves and not office staff. As they use the EMR/EHR to document clinical encounters, the application will be used for long periods of time, every day. Most EMR/EHR applications use a template-based user interface, although variations and dynamic applications of templates can affect the workflow of the application and the user experience, and in some cases, one user interface may be a better fit for a particular practice than another. For many large practices, customization at the enterprise level may be desirable for many templates and data elements, but customization capabilities for the layout and workflow at the group or individual provider level may be helpful, particularly for multispecialty practices. Providers need to be intimately involved in the selection process to ensure that the style of the application fits their needs and, in large practices, those of their peers.

- **Clinical staff buy-in.** Physician and nurse buy-in and their participation in both the system selection and implementation and the determination of configuration options are critical for a successful EMR/EHR implementation. In situations where providers resist efforts to place orders and/or document clinical notes electronically, the EMR/EHR is less efficient and benefits do not accrue as significantly to the practice. The persistence of paper components of medical records or the wide-scale incorporation of scanned document content reduces the overall efficiency of the EMR/EHR. Physician and nurse participation in system selection can help identify electronic documentation and ordering solutions that have simple and intuitive functionality that meets the needs of the practice. Participation can also help clinical staff better understand trade-offs that need to be made during the decision process and lessen the likelihood of widespread resistance to adoption. Regardless of the actual functionality, leadership and acceptance of the EMR/EHR by providers with a stake in the future of the practice are critical.

- **End-to-end technology site assessment.** The technology aspects of EMR/EHR adoption only begin with selecting and licensing a software solution. While the right software functionality can ease the workflow transition and burden of adoption on providers, the IT infrastructure at the practice also needs to be prepared for the EMR/EHR or a solution such as SaaS that lowers infrastructure requirements. EMR/EHR response time, uptime, and availability are critical components of physician satisfaction, and attention and accurate assessment of the server and infrastructure configuration can help ensure satisfactory performance. In addition, if EMR/EHR is to provide the required foundation for practices to

participate in HIE, and accountable care programs under healthcare reform, these elements are critical.

- **Readiness of the practice and providers.** The success of an EMR/EHR implementation and the level of eventual use of ordering functionality, particularly by providers, are tied to the readiness of the organization and approach to implementation. Readiness happens in degrees — while most practices will have the goal of getting to meaningful use by the deadlines to ensure maximum stimulus payments, additional steps may be required for some teams to prepare and implement according to these timelines. Customizing the solution and implementation approach to the practice, specialty, and team are key variables that lead to acceptance and use of systems.

- **Process improvement and clinical transformation.** The ability of an organization to meet the goals and objectives of an EMR/EHR project is closely tied to the practice's underlying ability and readiness to transform its administrative and clinical processes. Appropriate change management processes, including strong leadership and team-based approaches, must be in place to assist in this process. In many cases, EMR/EHR implementations that fail, don't hit adoption targets like meaningful use, or face strong resistance from staff failed to provide the underlying support in the form of training, preparedness, and support during the initial stages of implementation. The practice's processes and workflow need to be assessed, and the nature and scope of changes to the workflow as well as the ability of the selected EMR/EHR application to support the desired workflow need to be determined. This clinical transformation process should be continuous and can be leveraged going forward to support the changes in business models that will be required for accountable care and healthcare reform.

- **Integration with practice management systems.** Existing practice management systems represent investments that can be leveraged during EMR/EHR implementation. However, expected changes in provider needs for revenue cycle management capabilities under healthcare reform, the upcoming implementation of the Version 5010 standard for HIPAA transactions and ICD-10 coding, and the introduction of high deductible plans and pay-for-performance programs by payers may make a practice management system change timely. Practice management applications increasingly require more integration across revenue cycle and clinical data in a practice. In many cases, an EMR/EHR implementation will go hand in hand with the replacement of outdated practice management products. This can extend and add complexity to the implementation. However, many practices report significant financial benefits from the integration of charge capture and E&M coding documentation with clinical documentation using

an EMR/EHR. The integration with clinical documentation allows for more accurate coding with built-in documentation of complexity levels, removing the need to code conservatively and improving reimbursement, and this benefit will continue to be important with ICD-10 implementation. While many practice management vendors also offer integrated EMRs/EHRs, others do not; for some practices, the EMR/EHR offered by the practice management vendor may not be the system of choice, or the practice management system offered by the EMR/EHR vendor of choice is not appropriate to the practice. The practice needs to consider the trade-offs associated with not using an integrated practice management and EMR/EHR system and make a decision that meets the needs of the individual practice.

- **Interoperability.** Interoperability is a requirement of meaningful use and healthcare reform, and providers will need to implement interoperable systems that participate in health information exchange and actively exchange data with local hospitals, payers, and other providers to qualify for reimbursement under ARRA and participate in future accountable delivery networks. Ambulatory providers should consider options available in collaboration with local hospitals and HIEs that extend CPOE capabilities to local hospital laboratory and radiology facilities. Interoperable EMRs/EHRs also create additional efficiencies for providers as they are able to see and exchange data with their fellow care providers, collect data from across the continuum of care for care and disease management activities, and improve the quality of care and lower costs by reducing the number of duplicate tests and procedure that are performed because data on past care is not available. These efficiencies are a critical component of successful accountable care and systems that facilitate them are a key investment for ambulatory practices that want to profit under a patient-centered medical home or accountable delivery model.

- **Budget.** The cost of acquiring, implementing, and maintaining an EMR/EHR application is a hurdle for many practices despite the cost relief provided by ARRA. Pricing of ambulatory EMR/EHR systems varies widely and is not always proportional to the product's functionality and value. Practices of all sizes should consider vendors that offer Web-based applications and SaaS options for delivery, integrated practice management, and vendors that specialize in the small practice space for simple, easy-to-use applications that meet their needs. Large and multispecialty practices should consider vendors that allow them to integrate sophisticated practice management functions and achieve their operational goals while meeting the clinical documentation needs of all of their providers. All of the costs that will be incurred need to be considered in addition to license fees. An application that is easy to use can lower the opportunity costs of implementation by getting staff to start using the application sooner and reducing

downtime for the practice (usually operating at a reduced schedule) during implementation.

- **IT support availability.** Support cost and complexity should be carefully weighed. Service-oriented architecture can save on integration costs, and service-based delivery models such as hosting and SaaS can be used to lower up-front acquisition costs and ongoing support charges. Providers need to understand the implications of housing an EMR/EHR server onsite, such as the physical environment, backup, and disaster recovery options, when making the decision to install a mission-critical EMR/EHR application onsite. Unlike practice management systems, EMRs/EHRs require high availability and have stringent uptime requirements for access to clinical data while physicians are on call, an increased support requirement that should be considered.

EMR/EHR Application Differentiators

With over 150 vendors currently offering ONC-certified technology for meaningful use, EMR/EHR vendors are seeking to differentiate themselves however possible. The ARRA deadlines to complete implementations and qualify for incentives have created a battle for EMR/EHR market share. EMR/EHR differentiation strategies vary, and differentiation on the basis of functionality is limited, as EMR/EHR functionality is largely specified by the meaningful use requirements and certification specifications instituted prior to 2009.

In the absence of true differentiators based on functionality, key differentiators in the EHR market in 2011 include but are not limited to user interface design/usability, the financial stability of the vendor, the future road map of the vendor, channels and channel strategies, service offerings, delivery models, application architecture and infrastructure requirements, available pricing models, clinical mobility options, integration strategies, and the availability of complementary products/modules such as practice and revenue cycle management applications and services. With the vast number of EHR vendors competing for meaningful use installations, many serve a small customer base, and the growing functionality requirements for meaningful use make the financial stability of the vendor, and its ability to invest in the research and development required to support and sustain meaningful use certification, of vital importance to providers selecting applications.

It is clear that the EHR vendor landscape is consolidating, and many vendors are struggling to gain market share, build economies of scale, and offer products and services at competitive prices to meet the demands of meaningful use and survive in the post-ARRA market.

Vendor differentiators in the EMR/EHR market that providers should consider during EMR/EHR selection include:

- **Financial stability.** With the confusing marketplace including many small, unstable vendors, financial stability has become an important consideration for EMR/EHR buyers. For this reason, we have seen a number of ambulatory EMR/EHR acquisitions by large vertical vendors including inpatient EMRs/EHRs, horizontal IT vendors, and private equity firms seeking to consolidate ambulatory EMR/EHR market share. Although it will not be possible to avoid this consolidation cycle for many, providers should consider the financial stability and the history of the vendor when making selection decisions.

- **Service offerings.** With little differentiation available on functionality, service differentiators such as the delivery model and range of services offered are increasing in importance. These differentiators include implementation services and processes, the ability to deliver applications as a service, and ongoing support and process optimization services. Providers should consider the services available from the vendor and local system integrators and the cost of these services when making selection decisions.

- **Pricing.** ARRA subsidies represent cost relief for ambulatory EMR/EHR buyers, but significant investment by providers is still required. With EMR/EHR functionality increasingly commoditized along the functional requirements to meet meaningful use, pricing, flexibility, and the availability of multiple pricing models are increasingly attractive to prospective end users.

- **Application architecture.** Architectural aspects of the application that are able to add mobility (such as access to capabilities from smartphones and tablets), improve interoperability and integration with other applications and community providers, and support the future upgrade process and road map of the provider organization are growing in importance.

Barriers and Obstacles

For many years, providers have identified cost as one of the key barriers to EMR/EHR adoption. The costs include licensing of applications; installation, implementation, and support costs; and the opportunity costs associated with pursuing an EMR/EHR strategy. While ARRA provides relief that makes cost less of an issue, it also reveals and promotes the importance of other underlying barriers to adoption. These include:

- Clinician acceptance and buy-in to the value proposition for EMR, CPOE, and clinical documentation applications

- Process and behavioral change and issues surrounding the disruption of workflow and revenue streams at established practices implementing EMRs

- Technology issues surrounding the implementation, networking, and interoperability of EMRs with other healthcare applications at practices and in the community

After cost, the process and behavioral changes required by staff are the most commonly cited barrier to EMR/EHR implementation. Those affected by EMRs/EHRs include doctors, other providers, nurses, and office staff. End users repeatedly state that implementation problems are related to human factors on their side and not to vendors or applications.

Best Practices in EMR/EHR Implementation

It is clear that there are best practices emerging as implementations become more widespread that will help lessen the impact of the behavioral change required by an EMR/EHR implementation. Selecting systems for usability is at the top of the list, but this can be a subjective goal. Frequently, systems that conform to software industry best practices for usability are rejected by practices as difficult to use. Physicians complain that the application "doesn't think like they do" and find software counterintuitive and counterproductive to how they actually practice. These are issues of perception as the concept of using any application is so new and so foreign to those accustomed to paper records. Providers are subject to the influence of marketing and the selective presentation of the EMR/EHR technology's features and architecture during demonstrations. Talking to peers implementing the applications in question — peers who have similar requirements — is recommended for all providers.

Other best practices for building acceptance of EMR technology and managing change with physicians and staff include:

- **Involve physicians early.** One best practice is to involve providers by getting buy-in early in the selection and implementation processes and finding champions for the system among the providers in the practice, and then working with these leaders to influence their peers.

- **Involve practice staff in planning.** Involve practice staff in system selection, implementation, and configuration to get buy-in early and provide trained staff to assist providers in making the transition to EMR.

- **Leverage available expertise.** Leverage the expertise available from vendors that have led multiple, successful implementations at clients' sites. Speak with other customers of the vendor in similar practice settings to get an idea of the challenges involved in implementation and take these into consideration when planning.

- **Educate providers and staff.** Education is a best practice to help providers and practice staff understand the need for the EMR and its potential benefits.

- **Implement training.** Providers and practice staff need training prior to implementation to learn the basics of the system and then time during implementation to develop familiarity. Some additional training after familiarity and initial use is also helpful to reinforce proper use and workflow protocols.

Many users indicate that an approach to lessen the amount of process and workflow change is required to carefully configure the EMR/EHR to the existing clinical practice patterns. This approach has both advantages and drawbacks. While it may be advantageous for building acceptance of the technology initially, in the long term, failing to examine business processes can reduce the benefits from the EMR/EHR. Whether implementing new technology or responding to the call for healthcare reform, it is beneficial for provider organizations to conduct periodic assessments of their processes and to seek out new efficiencies and adjust processes to changes in their customers, their requirements, and the environment in which their business operates. Practices that do not reevaluate at least some portion of their processes at the time of EMR/EHR implementation risk simply automating broken systems. While they may gain some efficiency from the automation, there may be additional benefits that are foregone by failing to look holistically at the entire process. Depending on the practice, they may or may not be ready for process change in combination with EMR/EHR implementation, but addressing even small, selected pain points within their processes at the time of implementation can be quite beneficial, and some process change may be required in the future to demonstrate meaningful use and participate successfully in healthcare reform, depending on the eventual definitions and requirements that emerge.

Synopsis

This IDC Health Insights report provides an assessment of 10 EMR/EHR products that target midsize and large practices and qualify for ARRA incentives. The market for electronic health and medical records (EMRs/EHRs) is maturing rapidly under the influence of government incentives under the American Recovery and Reinvestment Act of 2009 (ARRA). According to Judy Hanover, research director, Provider IT Strategies, "With over 150 vendors currently offering ONC-certified technology for meaningful use, EMR/EHR buyers face an overabundance of options." This IDC MarketScape examines eight leading vendors of EMR/EHR technology to midsize and large ambulatory practices and provides a quantitative analysis of their current capabilities and future strategies.